Atty Docket: IDF 2281 (4000-12100)

Listing of the Claims:

- 1-12. (Canceled)
- 13. (Currently Amended) A method of testing software, comprising:

providing the software under testing;

providing a script to a test controller, wherein the script includes a plurality of messages and each of the plurality of messages has a message component and a data component, wherein the message component of each of the plurality of messages includes an identification of one of a plurality of simulators;

communicating each of the plurality of messages in the script, by the test controller,

to the simulator identified in the message component of each of the plurality

of messages; under-direction of the message component of each of the

plurality of messages to a corresponding one of a plurality of simulators

simulating an application that communicates with the software under

testing; and

testing the software by the <u>plurality of simulators</u> performing the script, wherein each of the <u>plurality of simulators interact with the software in accordance with the messages</u> communicated by the test controller to simulate an application in communication with the software; and

displaying a result of the testing.

14. (Canceled)

15. (Currently Amended) The method of Claim 13, wherein the message component of each of the plurality of messages further includes an indication of the interaction that the identified simulator performs, wherein the interaction includes directs the corresponding one of the plurality simulators to waiting to receive a response from the software being tested or transmitting the data component of the message to the software.

16-17. (Canceled)

- 18. (Currently Amended) A system for testing software, comprising:
 - a test scenario-operable to that maintains a set of messages, each message having a script portion and a data portion;
 - a simulator that executes the set of messages to simulate an application in communication with the software to be tested;
 - a test controller operable to that obtains the set of messages from the test scenario and communicates at least a portion of the set of messages to the simulator, wherein a portion of the script portion designates the direction of communication between the simulator and the software to be tested; and
 - a tool to develop the script portion of <u>each message in the set of messages</u> and provide the script portion of <u>each message in the set of messages</u> to the test scenario,
 - wherein the script portion of each message in the set of messages includes a designation of a direction of communication between the simulator and the software.
 - wherein the designation of the direction of communication for a first message in the set of messages is an inbound direction, and
 - wherein the simulator executes the first message by waiting to receive a response from the software and upon receiving the response from the software, the simulator compares the response to an expected response included in the data portion of the first message and reports a result of the comparison to the test controller.

19-21. (Canceled)

22. (Currently Amended) The system of Claim 18, wherein a portion of the script portion of each of the set of messages further includes is associated with an identification of the simulator.

23-24. (Canceled)

25. (Currently Amended) The system of Claim 18, wherein a portion of the script portion of a third message in the set of messages includes a delay between execution of the message and a second message, and

wherein the simulator executes the third message by delaying execution between a message prior to the third message and a message subsequent to the third message in accordance with the delay.

26-30. (Canceled)

31. (Currently Amended) The system of Claim 18, further comprising:

wherein the system further includes a second simulator that executes a second set of messages to simulate a second application in communication with the software;

and wherein the tool is operable to develop a plurality of messages in a manner such that the test controller promotes execution of the plurality of messages by at least one of the simulator and second simulator in a substantially sequential manner.

wherein the test scenario further maintains the second set of messages, each message having a script portion and a data portion and

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wherein the test controller further obtains the second set of messages from the test scenario

and communicates the second set of messages to the second simulator.

32-33. (Canceled)

34. (Currently Amended) The system of Claim 18, wherein the tool is operable to develops the

set of messages as reusable objects.

35. (Currently Amended) The system of Claim 34, wherein the tool is operable to changes the

order by which the plurality set of messages [[is]] are executed without modifying a content of the

message.

36. (Currently Amended) The system of Claim 34, wherein the tool-is operable to adjusts a

position of one or more of the plurality set of message in the test scenario and thereby changes the

order by which the plurality set of messages are executed.

37-38. (Canceled)

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- 39. (Currently Amended) A system for testing software, comprising:
 - a test scenario-operable to that maintains a plurality of messages;
 - a simulator to simulate an application in communication with the software-to-be tested;
 - a second simulator to simulate a second application in communication with the software;
 - a test controller-operable to that obtains each of the plurality of messages from the test scenario and communicate at least a first portion of the plurality of messages to the simulator and communicate a second portion of the plurality of messages to the second simulator; and
 - a tool to develop at least a portion of the message and provide the at least portion of the message to the test scenario, wherein the tool is operable to develop a the plurality of messages and provide the plurality of messages to the test scenario in a manner such that the test controller promotes sequential execution of [[a]] the first portion of the plurality of messages by the simulator and concurrently promotes sequential execution of the second portion of the plurality of messages by second simulator in a substantially sequential manner and a portion of the plurality of messages in a substantially consecutive manner.

40-43. (Canceled)

44. (Currently Amended) The system of Claim 39, wherein <u>each of the plurality of messages</u> is further defined as having have a script portion and a data portion.

- 45. (Currently Amended) The system of Claim <u>44</u>[[39]], wherein the tool is operable to develops the script portion of the <u>plurality of messages</u>.
- 46. (Currently Amended) The system of Claim <u>44</u>[[45]], wherein a portion of the script portion of <u>each of the plurality of messages</u> is associated with <u>includes</u> an identification of the simulator or the second simulator.
- 47. (Currently Amended) The system of Claim <u>46[[45]]</u>, wherein a portion of the script portion of each of the plurality of messages designates the <u>a</u> direction of communication between the simulator or the second <u>simulator included in the identification</u> and the software to be tested.
- 48. (Canceled)
- 49. (Currently Amended) The system of Claim <u>44</u>[[45]], wherein a portion of the script portion of one of the plurality of messages includes a delay between execution of the <u>a first</u> message and a second message.
- 50. (Currently Amended) The system of Claim 44, wherein the tool is operable to develops the data portion of the message by associating a data object with the data portion of the message or by receiving test data.

- 51. (Currently Amended) The system of Claim 50, wherein the simulator <u>passes the test data</u> to the software is operable such that the test data is passed by the simulator to the software to be tested.
- 52. (Currently Amended) The system of Claim 50, wherein the simulator compares the test data to data received from the software is operable such that the test data is compared by the simulator to data received from the software to be tested.
- 53. (Currently Amended) The system of Claim 39, wherein the <u>plurality of messages</u> each include an instruction component and wherein the simulator is operable to receives the <u>first portion</u> of the <u>plurality of messages</u> from the test controller and executes the instruction component simulating the application in communication with the software to test the software.
- 54. (Currently Amended) The system of Claim 39, wherein the tool-is operable to develops the messages as reusable objects.
- 55. (Currently Amended) The system of Claim 54, wherein the tool is operable to-changes the order by which the plurality of messages [[is]] are executed without modifying a content of the messages.
- 56. (Currently Amended) The system of Claim 54, wherein the tool is operable to adjusts a position of one or more of the plurality of message in the test scenario and thereby changes the an order by which the plurality of messages are executed.

- 57. (New) The method of claim 15, wherein in response to receiving the response from the software, the identified simulator compares the response to the data component of the message and reports a result of the comparison to the test controller, wherein the result of the testing includes the result of the comparison.
- 58. (New) The method of claim 13, wherein the plurality of simulators concurrently interact with the software to perform the script.
- 59. (New) The method of claim 58, wherein the plurality of simulators synchronously interact with the software to perform the script.
- 60. (New) The method of claim 58, wherein the plurality of simulators independently interact with the software to perform the script.
- 61 (New). The system of claim 18, wherein the designation of the direction of communication for a second message in the set of messages is an outbound direction, and

wherein the simulator executes the second message by communicating the data portion of the second message to the simulator.

62. (New) The system of claim 31, wherein the test controller sequentially communicates each of the messages in the set of messages to the simulator and sequentially communicates each of the messages in the second set of messages to the second simulator.

- 63. (New) The system of claim 62, wherein the test controller communicates the set of messages to the simulator concurrent with communicating the second set of messages to the second simulator.
- 64. (New) The system of claim 63, wherein the simulator and the second simulator independently execute the set of messages and the second set of messages respectively.
- 65. (New) The system of claim 63, wherein the simulator and the second simulator synchronously execute the set of messages and the second set of messages respectively.
- 66. (New) The system of claim 31, wherein the script portion of each message in the second set of messages includes an identification of the second simulator.
- 67. (New) The system of claim 31, wherein the script portion of each message in the second set of messages includes a designation of a direction of communication between the second simulator and the software, and
- wherein the designation of the direction of communication between the second simulator and the software is one of the inbound direction or an outbound direction.
- 68. (New) The system of claim 67, wherein a first portion of the second set of messages designates the inbound direction and a second portion of the second set of messages designates the outbound direction,

wherein the second simulator executes each of the first portion of the second set of messages by waiting to receive a response from the software and upon receiving the response from the software, the second simulator compares the response to an expected response included in the data portion of each of the first portion of the second set of messages and reports a result of the comparison to the test controller, and

wherein the second simulator executes each of the second portion of the second set of messages by communicating the data portion of each of the second portion of the second set of messages to the simulator.

69. (New) The system of claim 39, wherein the simulator and the second simulator independently execute the first portion of the plurality of messages and the second portion of the plurality of messages respectively.

70. (New) The system of claim 39, wherein the simulator and the second simulator synchronously execute the first portion of the plurality of messages and the second portion of the plurality of messages respectively.

71. (New) The system of claim 46, wherein first portion of the plurality of messages include the identification of the simulator, and the second portion of the plurality of messages include the identification of the second simulator.